Real-world treatment pattern, adherence, cost and healthcare resource utilization of commercially-insured patients with Waldenström macroglobulinemia in the United States

Background:

Waldenström macroglobulinemia (WM) is a rare, incurable non-Hodgkin lymphoma. There is limited real-world data on WM treatment and outcomes.

Objective:

To examine real-world treatment pattern, adherence, and economic outcomes in the US commercially-insured population.

Methods:

A retrospective observational study was conducted using the IBM MarketScan® commercial claims and Medicare supplement database. Adults with ≥2 WM diagnoses and ≥1 WM treatment from 2014 to 2019 were identified. Patients included were newly diagnosed, initiating treatment, and continuously enrolled for 6 months before and ≥60 days following the index date, defined as the first date of WM treatment. Treatment regimens were categorized as: rituximab monotherapy, chemotherapy-based (alone or in combination), proteasome inhibitor-based (alone or in combination with rituximab), ibrutinib (alone or in combination with rituximab), and other regimens. Treatment patterns were evaluated by frequency and duration of treatment regimen. Adherence is measured by discontinuation and switching rates. Healthcare resource utilization examined included inpatient, outpatient, and pharmacy visits. Total costs were calculated as sum of inpatient, outpatient and pharmacy costs per-patient-per-month (PPPM). Treatment regimens, costs, and hospitalizations were examined overall, and by line of therapy.

Results:

A total of 453 patients (mean age: 67 years, 51% male) received 1st-line therapy (mean duration: 246 days); 143 (32%) patients received 2nd-line therapy (mean duration: 231 days), and 24 (5%) received 3rd-line therapy (mean duration: 212 days). Rituximab monotherapy was the most commonly used 1st-line (31.8%) while Ibrutinib was the most commonly used regimen in both 2nd line (31.5%) and 3rd line (33.3%). Discontinuation rates were 47.5%, 52.4%, and 45.8%, and the switching rates were 25.4%, 10.5%, 20.8%during 1st, 2nd, and 3rd line of therapy, respectively. The overall hospitalization rate was 20% with an average length of stay (LOS) of 2.3 days. Approximately 17% (LOS: 1.4 days), 20% (LOS: 1.8 days), and 25%
(LOS: 7.0 days) of patients had a hospitalization, during 1st, 2nd, and 3rd line of therapy, respectively. Mean total PPPM costs were $19,8189 in overall population, and increased by line of therapy (1st: $19,185; 2nd: $19,760; and 3rd: $40,452).

Conclusions:

There remains a significant clinical and economic burden with suboptimal treatment adherence in US commercially-insured patients with WM. Future studies are needed to further understand factors associated with treatment selection